DOCUMENT RESUME

ED 367 616 SP 035 040

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TITLE The Effects of Peer Coaching on Elementary School Teachers.
PUB DATE Feb 94
NOTE 17p.; Paper presented at the Annual Meeting of the Eastern Educational Research Association (Sarasota, FL, February 1994).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attitude Change; Attitude Measures; Comparative Analysis; Control Groups; Elementary Education; *Elementary School Teachers; Experimental Groups; Faculty Development; Higher Education; *Inservice Teacher Education; *Program Effectiveness; Student Research; *Teacher Attitudes
IDENTIFIERS *Peer Coaching

ABSTRACT

This study examined the effects of peer coaching on elementary school teachers' professional attitudes and beliefs. Peer coaching programs are nonevaluative and are based on observation of classroom teaching followed by constructive feedback aimed at improving instructional techniques. An experimental group of teachers (n=23) voluntarily receiving peer coaching training was compared with a similar group of teachers (n=26), acting as a control, who did not receive the treatment. Both groups had positive attitudes and beliefs prior to the study. Training included sessions on supportive skills, the art of questioning, teachers' nonverbal communication, learning modalities, and thinking skills. Findings, based on a short survey administered to both groups before and after the training sessions, indicate that participants in the peer coaching experimental group exhibited no significant change in professional attitudes and beliefs, comfort level at taking risks experimenting with new instructional techniques, feelings of isolation, or job satisfaction level compared with teachers in the control group. The reason for this result may be that both groups had positive attitudes and beliefs prior to the study and that peer coaching may or may not have had an effect on maintaining the positive attitudes of the experimental group. Since peer coaching programs are designed to increase instructional effectiveness, longitudinal studies of the effectiveness of peer coaching are recommended for future research. (Contains 22 references.) (LL)

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The Effects of Peer Coaching on Elementary School Teachers

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Eastern Educational Research Association
Annual Conference

Sarasota, Florida
February, 1994

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The Effects of Peer Coaching on
Elementary School Teachers

Introduction

Demands for education reform are presently at an all-time high. New programs which required specialized skills, knowledge and different teaching strategies are being proposed as a result. If these programs are to be implemented successfully, staff development programs need to be improved. The structure of the school needs to be modified if teachers are to implement meaningful change. The recent concept of teacher collegiality is becoming widely recognized by staff developers in the form of peer coaching programs. Peer coaching may help effect needed changes in the school and stimulate greater productivity.

This study examined the effects of peer coaching on a sample of elementary school teachers' professional attitudes and beliefs, compared to a similar sample of teachers not involved in peer coaching. Most studies on peer coaching focus on changes in a group of teachers using peer coaching, but relatively few have used a control group in their research. This is an important consideration in evaluating a peer coaching program. Other aspects of peer coaching programs need further investigation as well. For example, there is need for more knowledge about how coaches can be trained more effectively. Staff developers need to consider how they will evaluate their peer coaching programs. This evaluation could examine instructional strategies used before and after the program, and how this can be linked to student achievement data (Ackland, 1991).

This study investigated the effect of peer coaching on public school educators. Specifically, this study examined what effect peer coaching training had on elementary school teachers' professional attitudes and beliefs compared to a similar group of elementary school teachers who did not have peer coaching training. Did the teachers who used peer coaching feel more comfortable taking risks experimenting with new instructional strategies than those who did not use peer coaching? Did peer coaching decrease isolation by creating a working environment of trust, allowing for more frequent interactions among teachers? In turn, did teachers' levels of job satisfaction increase? Can peer coaching be used to make in-service training more effective for teachers? Teachers who participated in the peer coaching program may have had a range of attitudes about the program as a useful device for increasing teacher effectiveness.

Many school districts in the nation are establishing peer coaching programs to extend or replace past in-service formats. Although the approaches have differed over the past two decades, three characteristics are common to all peer coaching programs. Peer coaching programs are non-evaluative, based on the observation of classroom teaching followed by constructive feedback, and aimed at improving instructional techniques (Ackland, 1991).

Administrative support for peer coaching programs is a key element to the success of peer coaching programs. The majority of findings from studies of peer coaching reveal that it has been successful in promoting collegiality and instructional dialogue

among teachers. Several studies have concluded that peer coaching improves educators' attitudes and beliefs towards various professional and personal factors. Some studies found that peer coaching positively increased students' perceptions of their teachers' effectiveness.

Methodology

This study was based on a casual-comparative research design. Pretest and post-test observations on two groups of similar elementary school teachers were conducted. Comparisons between groups determined if the treatment (peer coaching) caused improvements among those who received it. By comparing pretest scores of the control group and the experimental group, the researcher ruled out selection as a threat to internal validity. Since the two groups performed similarly before the treatment, but differently after it, the researcher again ruled out selection as a threat to internal validity. In this study the experimental group received the peer coaching treatment. The control group did not receive the treatment.

The null hypotheses for this study were:

(1) Participants in the peer coaching program will exhibit no significant change in their professional attitudes and beliefs compared to teachers in the control group.

(2) Participants in the peer coaching program will exhibit no significant change in their attitudes about levels of comfort taking risks experimenting with new instructional techniques

compared to the teachers in the control group.

(3) Participants in the peer coaching program will exhibit no significant change in their attitudes about isolation in the workplace compared to the teachers in the control group.

(4) Participants in a peer coaching program will exhibit no significant change in their level of job satisfaction compared to the teachers in the control group.

The subjects of this study were taken from a suburban county in central Maryland which enrolled approximately 22,000 students in grades K-12. The sample for this study involved forty-nine elementary public school teachers from this county. The experimental group consisted of twenty-three teachers in a public elementary school which had approximately 600 students. This group of teachers had worked together for only one year prior to this study. The experimental group received the peer coaching training presented by two assistant principals who used material which included information provided by Performance Learning Systems. The treatment began in September of 1992. The control group consisted of twenty-six teachers in a similar public elementary school in the same Maryland county as the experimental group, which had approximately 575 students enrolled. The control group of teachers had also only worked together for one year prior to this study. All subjects voluntarily completed the pretest and post-test observations in this study. The subjects in the experimental group were comprised of teachers who had voluntarily accepted the treatment.

The experimental group of teachers in this study voluntarily chose to participate in the peer coaching training program which was presented by two trained assistant principals. The trainers provided the theoretical and practical framework for the use of peer coaching. Training took place in modular form using the six essential components of peer coaching. Six individual sessions, which were approximately ninety minutes each, covered Agenda Skills, Supportive Skills, The Art of Questioning, Teachers' Nonverbal Communication, Learning Modalities, and Thinking Skills (Bell & Swam, 1992). There was one session per week which began in late September, 1992 and ended in November, 1992. Follow-up training sessions took place in January and March of 1993. Teachers were provided opportunities to experiment with the prescribed skills both during the sessions and during the period between sessions. While implementing the prescribed skills in the regular classroom setting, peers provided feedback through the use of coaching.

This study sought to determine the effects of peer coaching on teachers' professional attitudes and beliefs through the use of a survey designed by the researcher. The survey was short and concise so as not to cause extra burden for the teachers involved and to ensure a higher return upon completion. The survey was administered prior to the commencement of the peer coaching training in September, 1992, to all willing participants in the study. The same survey was re-administered to all willing participants in April, 1993. To ensure that the same participants

who responded in April, 1993 had also completed the same survey in September, 1992, the researcher added this question to the post-test: Did you complete this survey in September, 1992? Please circle one: Yes NO Unsure.

The survey consisted of a biographical data form, nineteen questions directly related to this study, and a blank section for additional comments if the participants desired to include them. A Likert-type scale was used to score each of the four sections of statements on the survey. The researcher asked respondents to refer to the following scheme in order to respond to each of the nineteen items: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly agree. The first five statements on the survey related to the teacher's professional attitudes and beliefs about teaching. Statements numbered six through ten related to the teacher's level of comfort in taking risk and trying new teaching techniques. Statements numbered eleven through fifteen referred to the teacher's feelings of isolation in the teaching environment. Statements numbered sixteen through nineteen referred to the teacher's feelings about job satisfaction.

Prior to the present study, a pilot study was conducted, involving nine elementary teachers from a different school and two experts, in order to test the clarity of the survey. These subjects were accessible to the researcher which enabled them to discuss any problems or questions related to survey statements. Immediately revisions were made where indicated. The survey was deemed adequate to obtain the desired results.

The researcher attended faculty meetings of both schools involved in this study in order to introduce the survey. The researcher proceeded to distribute the cover letter, biographical form, and survey to the staff, and requested that the teachers willing to participate, return the two forms to the researcher through inter-office mail within two weeks. The researcher followed this procedure for the post-test at the experimental group's school as well. However, the researcher sent the information directly to the principal of the control group's school requesting the forms be distributed to the teachers prior their faculty meeting. These surveys were returned to the researcher by inter-office mail. The raw data was entered into a computer for processing and analysis. Likert values for questions number four, eight, fourteen, and eighteen were recoded as follows: 1 = 5, 2 = 4, 4 = 2, 5 = 1.

In order to test the null hypotheses of this study, the researcher conducted a two-way Analysis of Variance (ANOVA). This test of significance was used to determine whether there was a significant difference between two or more means at a given probability level. Results were tested a the .05 level of significance using the Statistical Package for the Social Sciences (SPSS). In addition, to the statistical calculating, the testing of the F ratio to the hypotheses included the mean scores and standard deviations determined by the computer program, which scored and analyzed each test individually.

All ninety-eight surveys were entered into the computer. The

computer calculated the following information for each item: frequency, percent, mean, mode, standard error, standard deviation, and median. The cell means for each of the nineteen survey questions were revealed. An Analysis of Variance was displayed for each question. The cell means for each of the four sections of the survey was computed, as well as an Analysis of Variance for each section.

There were several potential limitations that affected this study. First, the sample of the study was relatively small, which limited the generalization of the results. Second, participants of both groups in the study were volunteers, many of whom dedicated and involve in the teaching profession. Consequently, it was difficult to produce dramatic improvements due to the tendency of volunteers to be naturally more willing to experiment and be more motivated in general. Also, many of these participants may have been functioning at peak efficiency before the study began. Third, the brief duration of this study may have contributed to the lack of larger gains. Finally, the evaluation process itself may not have been conducted with adequate care. The post-test for the control group was not administered uniformly and in a manner that ensured reliable measurement.

Findings

There were forty-nine females who voluntarily participated in this study. The control group consisted of twenty-six teachers and the experiment group consisted of twenty-six teachers. The mean

age and number of years experience were similar for both groups. The mean level of education was almost an M.A. Degree or equivalent for both groups combined. The four null hypotheses for this study were accepted due to the fact that this researcher could find on significant results at the .05 level.

Statistical analysis of the survey data revealed high level responses to form individual statements on the survey. In general, the means and standard deviations for the ninety-eight cases reflected positive attitudes and beliefs of all subjects. Individual analyses of the survey statements indicated there were four statements which exhibited significant F statistics at the .05 level. In three out of the four statements, the experimental group displayed positive gains, while the control group experienced slight declines in their responses. These three statements all represented within school differences. The fourth statement revealed that both groups signified decreases in their responses.

Conclusions

The biographical data form provided information about all forty-nine female subjects who had voluntarily agreed to participate in this study. Both the control and the experimental group had only worked together for one year prior to this study. The sample of this study was relatively small and included only females, which limited the generalizability of the results. Participants of both groups in the study were volunteers. As a result, it was difficult to produce major improvements due to the

tendency of volunteers to be naturally more willing to experiment and be more motivated in general. Also, many of these participants may have been performing at peak efficiency before the study began. This researcher also cannot be sure that the fact that both groups had only worked together for one year prior to the study did not have an impact on the results of the study. The levels of education differed with the groups. The control group had more participants with higher levels of education than the experimental group did. This researcher is not certain what effect this had, if any, on the results of this study.

All four null hypotheses for this study were accepted as a result of the Analysis of Variance (ANOVA) performed for each section of the survey. This researcher concluded that participants in the peer coaching exhibited no significant changes in their professional attitudes and beliefs, levels of comfort taking risks experimenting with new instructional techniques, feelings of isolation, or level of job satisfaction, compared to the teachers in the control group. Review of the means and standard deviations for the ninety-eight cases reflected high level responses to the survey questions. This researcher concluded that both groups had positive attitudes and beliefs prior to this study. This researcher concluded that the peer coaching program may or may not have had an effect on maintaining the positive attitudes of the experimental group.

Individual analyses of the survey statements indicated there were four statements which exhibited significant F statistics at

the .05 level. In three of these four statements, the experimental group displayed positive gains, while the control group experienced slight declines in their responses. In these three statements, the results signified within school differences. This researcher found it interesting to note two of these questions related to section three of the survey, which tested null hypothesis number three of the study. Null hypotheses number three stated that the participants in the peer coaching program would not exhibit any significant change in their attitudes about isolation in the workplace compared to the teachers in the control group. This researcher concluded that it is possible that the peer coaching program had a positive effect on the experimental group's feelings of isolation, and ability to get to know other teachers. The fourth statement which depicted significant F statistics at the .05 level, indicated that both groups experienced decreases in their responses. The statement related to feelings about having the opportunity to do the things they did best in their current teaching positions. This researcher concluded that perhaps the timing of the pretest affected their responses. The pretest was administered towards the end of the school year.

This researcher concluded that the brief duration of this study may have contributed to a lack of larger gains. The peer coaching program for the experimental group began in September of 1992, and ended in November of 1992, with follow-up training sessions in January and March of 1993. It was important to note that the peer coaching program did not actually begin until

January, 1993. The experimental group had applied for a grant to help pay for substitute teachers while the peer coaches worked together. The experimental group had to wait for the grant money to be released prior to securing substitutes. It was also important to note that all teachers in the experimental group had volunteered to participate in the peer coaching program prior to even applying for the grant. In sum, the peer coaching program had only been in effect for approximately four months prior to administering the post-test.

This researcher has concluded that even thought the four null hypotheses of this study were accepted, the fact that there were a few slight gains in the responses of the experimental group compared to the control group, the peer coaching program was valuable.

Recommendations

The majority of findings from studies of peer coaching reveal that it has been successful in promoting collegiality and instructional dialogue among teachers. Several studies have concluded that peer coaching improves educators' professional attitudes and beliefs. The review of the literature in this study revealed the need for more detailed studies for peer coaching programs. There is a need for more knowledge about how coaches can be trained more effectively. Staff developers need to consider how they will evaluate the peer coaching program. The evaluation could examine instructional techniques used before and after the program.

This researcher believes that in studying the effects of the peer coaching program, it is important to have a control group as well as an experimental group. This researcher also believes it is important to study the possible effects of peer coaching on student achievement, since peer coaching programs are designed to increase instructional effectiveness. Longitudinal studies of the effectiveness of peer coaching programs are also indicated. This researcher would like to administer another post-test to the same subjects in this study after the peer coaching program has been in existence for at least another six months. This researcher believes that there would be larger overall gains if the program has more time to work. This researcher would also like to study the unique qualities of the facilities, administrators, and communities of the two groups in this study, to determine their role in the program's success or failure.

This researcher concludes that there needs to be more research done in the area of staff development. Peer coaching programs should be looked at seriously as the vehicle for implementing and maintaining new instructional programs. Staff developers need to consider how to adequately evaluate peer coaching programs, and longitudinal studies need to be initiated to better assess these peer coaching programs.

References

Ackland, R. (1991). A review of the peer coaching literature. Journal of Staff Development, 12(1), 22-27.

Bell, M. & Swam, N. (1992, June). Peer Collaboration: A method to increase instructional effectiveness. Paper presented to the Carroll County Board of Education, Westminster, MD.

Celso, N. & Morris, H. (1985). Systematic Management of Change is the Key to Successful Staff Development. An Initial Study of the Bloomfield Public Schools Staff Development Project. Teacher Essentials, Styles & Strategies (TESS). Bloomfield Public School District, NJ. (ERIC Document Reproduction Service No. ED 288 244).

Cohen, M. (1988). 'Restructured' schools: Frequently invoked, rarely defined. ASCD Update, 30(1), 1, 6-7.

Garmston, R. (1987). How administrators support peer coaching. Educational Leadership, 44(5), 18-26.

Gilman, D. (1988). Teachers Teaching Teachers: A study in staff development for improving teacher effectiveness. Terre Haute, Indiana: Indiana State University, Professional School Services. (ERIC Document Reproduction Service No. ED 300 352).

Gilman, D. & Smuck, E. (1988). An evaluation of the staff development model, Teachers Teaching Teachers, of the Greater Jasper Schools. Terre Haute, Indiana: Indiana State University. Professional School Services (ERIC Document Reproduction Service No. ED 300 354).

Gilman, D. & Sommer, J. (1988). The Summative Evaluation. Teachers Training Teachers. A project in staff development for improving teacher effectiveness. Terre Haute, Indiana: Indiana State University. Professional School Services. (ERIC Document Reproduction Service No. ED 300 353).

Hall, L. & McKeen, R. (1991). Increased professionalism in the work environment of teachers through peer coaching. Education, 109(3), 310-317.

Houston, W. (1987). Lessons for teacher education for corporate practice. Phi Delta Kappan, 68(5), 388-392.

Hyman, R. (1990). Peer coaching: Premises, problems, potential. The Education Digest, 56(1), 52-56.

Joyce, B., & Showers, B. (1982). The coaching of teaching. Educational Leadership, 40(1), 4-10.

Joyce, B. & Showers, B. (1983). Power in staff development through research in training, Alexandria, VA: Association for Supervision and Curriculum Development. (ERIC Document Reproduction Service No. ED 240 667).

Joyce, B. & Showers, B. (1988). Student Achievement through staff development. White Plains, New York: Longman.

Michaels, K. (1988). Caution: Second-wave reform taking place. Educational Leadership, 45(5), 3.

National Commission on Excellence in Education. A nation at risk: The imperative for educational reform. Washington, DC: U.S. Department of Education, 1983.

Raney, P. & Robbins, P. (1989). Professional growth and support through peer coaching. Educational Leadership, 46(5), 35-38.

Regan, S.D. (1985). Human relations for educators through staff development. Journal of Humanistic Education and Development 24(2), 69-75.

Russell, D. & Williamson, L. (1990). Peer coaching as a follow-up to training. Journal of Staff Development, 11(2), 2-4.

Showers, B. (1985). Teachers coaching teachers. Educational Leadership, 42(7), 43-48.

Sparks, G. M. (1983). Synthesis of research on staff development for effective teaching. Educational Leadership, 45(3), 65-72.

Vockell, E. (1983). Educational Research. New York: Macmillan Publishing Company.